

**Transport Protocols for Space-Based Internets
Product Development Schedule and Milestones:**

	FY00	FY01	FY02
Subtask 1	▲ 1 ▲ 2 ▲ 3 ▲ 4 ▲ 5		
Subtask 2		▲ 8	▲ 9
Subtask 3		▲ 10 ▲ 11	▲ 12

Subtask	Milestone No.	Description	Date
1. Enhanced Internet Protocols for GEO Orbits	1	Space-based Internet working group meeting Oct 26 at JPL	1Q00
	2	Initiation of RFC within IETF on TCP round trip time (RTT) estimation algorithm	2Q00
	3	Complete Ohio University research grant on multi-stream TCP.	3Q00
	4	Complete advanced queuing mechanism investigation in long-delay environments.	3Q00
	5	Complete research on TCP Pacing and initiate RFC within IETF on TCP Pacing algorithms	4Q00
2. Mobile Routing	6	Establish mobile-ip environment and mobile-ip testing and analysis methodology	3Q00
	7	Simulation study of mobile-ip and mobile routing for NASA specific mission using "ns"	4Q00
	8	Complete investigation of mobile-ip in long-delay, error-prone networks	3Q01
	9	Complete investigation of mobile adhoc network for NASA specific mission such as Sensor Web	4Q02
3. Next Generation Protocols	10	Complete capacity study regarding utilizing UDP protocol to test various algorithms of reliable protocols	2Q01
	11	Incorporation of source quench to explicit congestion notification (ECN) for long delays	4Q01
	12	Gateway Implementation for Interplanetary Internet	4Q02

Major Deliverables	Date
1. Complete research on TCP Pacing and initiate RFC within IETF on TCP Pacing algorithms	3Q00
2. Establish mobile-ip environment and mobile-ip testing and analysis methodology	3Q01
3. Complete investigation of mobile-ip in long-delay, error-prone networks	4Q01
4. Gateway Implementation for Interplanetary Internet	4Q02